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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,318	07/13/2001	William C. Altmann	19570-05858	6174

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EXAMINER	
NATNAEL, PAULOS M	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,318	ALTMANN, WILLIAM C.	
	Examiner	Art Unit	
	Paulos M. Natnael	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,20 and 21* is/are rejected.

7)☒ Claim(s) *19 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim **23** rejected under 35 U.S.C. 102(e) as being anticipated by MacInnis et al. U.S. Pat No. **6,738,072.**

Considering claim **23**, MacInnis teaches a graphics display system with anti-flutter filtering and vertical scaling feature. Fig.4 of MacInnis specifically discloses FIFO 100 which receives the video input signal and a video scaler 104 which scales the video signal input to it. (Note that temporarily storing the video signal in the FIFO is, in effect, retiming the video signal, i.e. by delaying the output the system is retiming it). As to using a common clock, MacInnis teaches utilizing a single clock in the integrated circuit so that "cost" for the IC may be "lower" and "less noise or interference" may also be generated by the one clock. See Col. 36, lines 19-28.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-18 are again rejected under 35 U.S.C. 103(a) as being unpatentable over MacInnis et al.

Considering claim 1, the reference of MacInnis et al. (hereinafter MacInnis) teaches anti-flutter filtering and scaling of graphics and video data. As illustrated In Fig.2, MacInnis discloses digital video input, bypass video input, as well as analog video input. The latter two are input to the video decoder, which includes YUV scaler and TBC 72 the output of which is inputted to the multiplexer. The Multiplexer selects either the digitized analog signal output from the video decoder 50 or the digital video input from the preceding stage. (see col. 4, lines 17-58) MacInnis teaches that the video signals may be analog or digital.

As to the next stage, it would have been obvious to the skilled in the art at the time the invention was made to readily recognize that the source of the digital signal, for example, to be the preceding stage, and the receiver or the IC as the current stage, the video scaler 52 would be considered the next stage.

Considering claim **2**, the system of claim 1, wherein said DVS comprises: a retiming FIFO for retiming the received video received from the preceding stage; and a scaling engine for scaling the retimed video data to match the constant resolution, is met by Line Buffer 178 and Scaler Engine 182 Fig.5, respectively. (see also fig.4, FIFO 100 and video scaler 104)

Considering claim **3**, the system of claim 1, further comprising a receiver for receiving a signal containing digital video from the preceding stage, is met by MPEG Decoder 160, fig.5;

Considering claims **4 and 5**, MacInnis et al. discloses CLUT interface and high speed I/O bus system. MacInnis et al does not disclose a TMDS or LVDS signaling. However, the Examiner takes Official Notice in that Transition Minimized Differential Signaling (TMDS) and Low-voltage differential signaling (LVDS) are well known signaling methods in the DVI standard, and therefore, it would have been obvious to the skilled in the art to modify the system of MacInnis by providing such signaling capability in order to improve video transmission from the source to the set-top and/or from the set-top box to the television set.

Considering claim **6**, the system of claim 1, wherein said signal contains audio, is met by audio input 34, fig.1;

Claim 7 is a method claim of claim 1 and, therefore, claim 7 is rejected for the same reasons as in claim 1.

Claim 8 is a method claim of claim 2 and, therefore, claim 8 is rejected for the same reasons as in claim 2

Considering claim **9**, the method of claim 7, wherein said step of scaling further comprises the step of superimposing an on-screen display (OSD) message, is met by Fig.31 where an embodiment is illustrated which is a flutter filtering and graphics scaling circuit.

Regarding claim **10**, see rejection of claim 4.

Regarding claim **11**, see rejection of claim 5.

Regarding claim **12**, see rejection of claim 6.

Regarding claim **13**, see rejection of claim 1.

Regarding claim **14**, see rejection of claim 2.

Regarding claim **15**, see rejection of claim 4.

Regarding claim **16**, see rejection of claim 5.

Regarding claim **17**, see rejection of claim 1;

Regarding claim **18**, see rejection of claim 2;

As to claims **20** and **21**, see rejection of claims 1 and 7.

Response to Arguments

5. Applicant's arguments filed 12/9/04 have been fully considered but they are not persuasive.

Applicant argues that in MacInnis Chip, incoming digital video signals are not re-clocked as they do not pass through the time base corrector 72 and the re-clocking does not take place within the scaler. However, examiner submits that MacInnis teaches a YUV scaler within the Line locked SRC in the video decoder (fig.18) and that the time base corrector 72 ...corrects **digitized analog video** in the time domain to reduce or prevent jitter. (col. 4, lines 44-46) In other words, the video signal which is a digital signal at this stage is scaled by the YUV scaler and timebase-corrected by TBC 72 within the video decoder. Thus, the claimed scaling and constant-frequency clocking are met by the MacInnis reference.

Allowable Subject Matter

6. Claims **19,22** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liu et al. , U.S. 6,771,714 teaches a timing recovery using the pilot signal in High definition TV, wherein the digital mixer 18 scales the signal using the oscillator loops.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos M. Natnael
Primary Examiner
Art Unit 2614

PMN
December 9, 2005